CLAIMS

1. A retainer comprising:

two annular portions; and

a plurality of pillar portions for connecting the two annular portions to each other to define a plurality of pockets in combination with the annular portions, wherein

an engagement portion to be engaged with an outer ring is formed on an outer periphery of at least one annular portion of the two annular portions and part of each of the pillar portions located on the annular portion side to block the retainer from rotating circumferentially relative to the outer ring,

a non-engagement outer peripheral surface which is not engaged with the outer ring is formed on an outer peripheral surface of the other annular portion and part of each of the pillar portions located on the annular portion side, and

the non-engagement outer peripheral surface is located inside a circle smaller by a specified size than a circumcircle of the engagement portion.

2. The retainer as claimed in Claim 1, wherein

the non-engagement outer peripheral surface is a cylindrical surface.

3. A retainer comprising:

two annular portions; and

a plurality of pillar portions for connecting the two annular portions to each other to define a plurality of pockets in combination with the annular portions, wherein

an engagement portion to be engaged with an inner ring is formed on an inner periphery of at least one annular portion of the two annular portions and part of each of the pillar portions located on the annular portion side to block the retainer from rotating circumferentially relative to the inner ring,

a non-engagement inner peripheral surface which is not engaged with the inner ring is formed on an inner peripheral surface of the other annular portion and part of each of the pillar portions located on the annular portion side, and

the non-engagement inner peripheral surface is located outside a circle larger by a specified size than a circumcircle of the engagement portion.

4. The retainer as claimed in Claim 3, wherein

the non-engagement inner peripheral surface is a cylindrical surface.

5. A one-way clutch comprising:

an outer ring having an inner peripheral engagement surface which is a cam surface having a generally polygonal shape in its cross section;

an inner ring having an outer peripheral surface which is a circumferential surface;

the retainer as defined in Claim 1 placed between the inner peripheral engagement surface and the outer peripheral surface;

rollers placed in the pockets of the retainer; and

biasing members for respectively biasing the rollers in one circumferential direction.

6. A one-way clutch comprising:

an outer ring having an inner peripheral surface which is a circumferential surface;

an inner ring having an outer peripheral engagement surface which is a cam surface having a generally polygonal shape in its cross section;

the retainer as defined in Claim 3 placed between the inner peripheral surface and the outer peripheral engagement surface;

rollers placed in the pockets of the retainer; and

biasing members for respectively biasing the rollers in one circumferential direction.

7. A method for assembling a one-way clutch comprising:

forming a retainer assembly by respectively placing rollers in the pockets of the retainer as defined in Claim 1 and placing biasing members such that each biasing member is disposed between the pillar portion of the retainer and the roller corresponding to the pillar portion;

inserting the non-engagement outer peripheral surface of the retainer of the retainer assembly axially in an non-engagement state to between an inner peripheral engagement surface of an outer ring and an outer peripheral surface of an inner ring of the one-way clutch so that the roller of the retainer assembly is disposed in a position where the roller is clearance-fitted between the inner peripheral engagement surface of the outer ring of the one-way clutch, which is a cam surface having a generally polygonal shape in its cross section, and the outer peripheral surface, which is a circumferential surface of the inner ring; and

rotating the retainer assembly such that the engagement portion of the retainer becomes coincident in

peripheral position with the engagement portion of the outer ring and thereafter further inserting the retainer assembly axially between the outer peripheral surface of the inner ring and the inner peripheral engagement surface of the outer ring such that the engagement portion of the retainer and the engagement portion of the outer ring are engaged with each other.

8. A method for assembling a one-way clutch comprising:

forming a retainer assembly by respectively placing rollers in the pockets of the retainer as defined in Claim 3 and placing biasing members such that each biasing member is disposed between the pillar portion of the retainer and the roller corresponding to the pillar portion;

inserting the non-engagement inner peripheral surface of the retainer of the retainer assembly axially in an non-engagement state to between an inner peripheral surface of an outer ring and an outer peripheral engagement surface of an inner ring of the one-way clutch so that the roller of the retainer assembly is disposed in a position where the roller is clearance-fitted between the inner peripheral surface, which is a circumferential surface of the outer ring, and the outer peripheral engagement

surface, which is a cam surface of the inner ring having a generally polygonal shape in its cross section, of the inner ring of the one-way clutch; and

rotating the retainer assembly such that the engagement portion of the retainer becomes coincident in peripheral position with the engagement portion of the inner ring and thereafter further inserting the retainer assembly axially between the outer peripheral engagement surface of the inner ring and the inner peripheral surface of the outer ring such that the engagement portion of the retainer and the engagement portion of the inner ring are engaged with each other.